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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,815	01/03/2001	Martin Kaplan	60680-352	3426

26127 7590 12/04/2002

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[REDACTED] EXAMINER

CUEVAS, PEDRO J

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2834

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/753,815	KAPLAN ET AL.
	Examiner	Art Unit
	Pedro J. Cuevas	2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 September 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5,8-13 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 18-21 is/are allowed.
- 6) Claim(s) 1-5,8-13,16 and 17 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on 19 September 2002 is: a) approved b) disapproved by the Examiner
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
. | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on September 19, 2002 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Response to Arguments

2. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,970,907 to Meyers.

Meyers clearly teaches the construction of a pulsating torque apparatus and method comprising:

a stator (104) formed having a plurality of individual phase segments (column 3, lines 11-17) which are arranged in an annular array, the stator being connected to a base (100) (claim 9), the segments being provided with phase windings (112, 114, 116, 118, and 120) and stator pole teeth, said phase segments being connected with a stationary bearing race (122), and said pole teeth projecting in a generally radial direction; and

a rotor (110), surrounded by said stator, formed integrally with a bearing race, said rotor being vertically supported by said stator by a plurality of ball-bearing bearing members (108 & lower bearing in race 122), said rotor having a plurality of rotor pole teeth disposed adjacent said stator pole teeth, said rotor pole teeth being separated from said stator pole teeth by a first generally vertically extending gap (Figure 1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 8, 12, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,970,907 to Meyers in view of U.S. Patent No. 3,851,199 to Apsit et al. Meyers disclose the construction of a pulsating torque apparatus and method as described above.

However, it fails to disclose:

a rotor having a large central opening;

a stator having a core which is supported underneath a base connected with said stator race; and

a section of said rotor overlaps a section of said stator.

Apsit et al. teach the construction of an inductor generator having:

a rotor with a large central opening (Figure 3);

a stator having a core which is supported underneath a base connected with said stator race; and

a section of said rotor overlaps a section of said stator,
for the purpose of providing a winding-less toothed rotor.

It would have been obvious to one skilled in the art at the time the invention was made to use the rotor disclosed by Apsit et al. on the a pulsating torque apparatus and method disclosed by Meyers for the purpose of providing a winding-less toothed rotor.

7. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,970,907 to Meyers in view of U.S. Patent No. 3,081,624 to F. Mayer.

Meyers disclose the construction of a pulsating torque apparatus and method as described above.

However, it fails to disclose a rotor and a stator having pole teeth facing each other across two vertical annular gaps.

F. Mayer teach the construction of an apparatus having a rotor and a stator with pole teeth facing each other across two vertical annular gaps (Figures 2, 3, 3a, 4, 5, and 6) for the purpose of furnishing electrical signals for torque measurement.

It would have been obvious to one skilled in the art at the time the invention was made to use the apparatus disclosed by F. Mayer on the pulsating torque apparatus and method disclosed by Meyers for the purpose of furnishing electrical signals for torque measurement.

Allowable Subject Matter

8. Claims 18-21 are allowed.

9. The following is an examiner's statement of reasons for allowance: the prior art of record taken alone or in combination fails to disclose the construction of a variable reluctance motor and an aimable ordinance platform as claimed on independent claims 18-21 wherein:

the stator has a coil winding which is vertically suspended underneath the bearing race of the stator; or

the rotor has a core, which is vertically suspended underneath the bearing race of the rotor.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

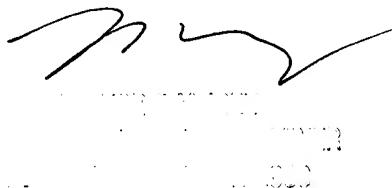
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Néstor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
November 27, 2002

A handwritten signature in black ink, appearing to read "P J Cuevas".